

U.S. DEPARTMENT OF AGRICULTURE  
WASHINGTON, D.C. 20250

<b>DEPARTMENTAL NOTICE</b>		<b>Number:</b> 3300-007
<b>SUBJECT:</b>  BUILDING TELECOMMUNICATIONS CABLING AND INFRASTRUCTURE	<b>DATE:</b> November 23, 2004	<b>OPI:</b> Office Of the Chief Information Officer, Telecommunications Policy and Planning Division
	<b>CODIFICATION/EXPIRATION:</b> This Notice will expire one year from the date it is signed, unless rescinded or canceled earlier.	

1 PURPOSE

The purpose of this notice is to update DR 3300 –1, Telecommunications & Internet Services and Use, Appendix K, Building Telecommunications Cabling and Infrastructure with guidance that references current industry standards, codes and practices.

2 SUMMARY

The existing Appendix K of DR 3300 –1 established policies and assigned responsibilities for Building Telecommunications Wiring and Infrastructure in Federal office buildings and building complexes. Several of the Federal Information Processing Standards Publications (FIPS PUBS) referenced in Appendix K have been withdrawn. The National Technology Transfer and Advancement Act of 1995 requires the use of technical industry standards that are developed by consensus.

3 SCOPE

This Notice applies to all USDA agencies, staff offices, programs, teams, contractors, consultants, and organizations engaged in the acquisition, installation, operations and maintenance of telecommunications cabling infrastructure.

4 REFERENCES

NCS Federal Telecommunications Recommendation, FTR1090-1997: Commercial Building Telecommunications Cabling Standard  
ANSI/EIA/TIA-568: Commercial Building Telecommunications Wiring Standard  
ANSI/EIA/TIA-569: Commercial Building Standard for Telecommunications Pathways and Spaces  
ANSI/EIA/TIA-570: Residential and Light Commercial Telecommunications Wiring

## Standard

ANSI/EIA/TIA-606: Administration Standard for the Telecommunications Infrastructure of Commercial Buildings

ANSI/EIA/TIA-607: Commercial Building Grounding and Bonding Requirements for Telecommunications

## 5 ABBREVIATIONS

ANSI – American National Standards Institute

CIO - Chief Information Officer

EIA – Electronics Industry Alliance

FIPS - Federal Information Processing Standards

FTR - Federal Telecommunications Recommendations

GWAC - General Services Administration Wiring and Cabling Contract

NCS – National Communications System

OCIO - Office of Chief Information Officer

TIA – Telecommunications Industry Association

TSO - Telecommunications Services and Operations

## 6 POLICY

- a The use of the standards specified in the Federal Telecommunications Recommendations (FTR) and American National Standards Institute/Electronic Industry Alliance/Telecommunications Industry Association (ANSI/EIA/TIA) Standards is mandatory for the acquisition of new equipment and services by all Departments and Agencies of the Federal Government.
- b Agencies and staff offices shall specify in solicitations or contracts that all wiring shall comply with FTR 1090-1997/ANSI/EIA/TIA-568, Commercial Building Telecommunications Cabling Standard. All agencies and staff offices shall use the standard in the planning and design of all office buildings, including both the wiring of new buildings and the upgrading of existing wiring and cable plant in Federal and leased non-Federal buildings. Agencies and staff offices responsible for wiring employee residences and light commercial facilities with lower cable performance may use ANSI/EIA/TIA-570, Residential Cabling Standard, if appropriate.
- c Agencies and staff offices responsible for the architectural design of new buildings shall comply with the provisions of the ANSI/EIA/TIA-569, Commercial Building Standard for Telecommunications Pathways and Spaces.
- d Agencies and staff offices responsible for the administration of the telecommunications infrastructure (telecommunications equipment spaces, cable pathways, bonding/grounding, wiring, and termination hardware) shall comply with the provisions of ANSI/EIA/TIA-606, Administration Standard for the Telecommunications Infrastructure of Commercial Buildings.

- e Agencies and staff offices responsible for the design, maintenance, renovation, or retrofit of telecommunications grounding systems within new or existing Federal buildings shall comply with the provisions of ANSI/EIA/TIA-607, Commercial Building Grounding and Bonding Requirements for Telecommunications.

## 7 SPECIAL INSTRUCTIONS

Agencies may request a waiver from the mandatory use of the standards referenced in this Notice. Waivers shall be granted only when:

- a Compliance with a standard would adversely affect the accomplishment of the mission of an operator of a federal computer/telecommunications system, or
- b A major adverse financial impact on the operator, which is not offset by government wide savings, would result.

An agency requesting a waiver to a standard shall submit a decision paper to the Office of the Chief Information Officer (OCIO). The paper shall include an issue statement, background, and reasons for requesting a waiver.

## 8 RESPONSIBILITIES

- a The Office of the Chief Information Officer will:

- (1) Represent the United States Department of Agriculture (USDA) in the Federal, National, and industry standards development process; and
- (2) Manage and oversee the implementation of the above ANSI/EIA/TIA and FTR at the following locations:
  - (a) Washington, DC Metropolitan Area (area covered by WITS);
  - (b) Kansas City, MO Metropolitan Area;
  - (c) Fort Collins, CO Metropolitan Area; and
  - (d) Other locations as specified by the CIO.

- b Agencies and Staff Offices will:

- (1) When developing telecommunications cost estimates for lease renewals or building moves, determine the cost of applying the standards. Where cost savings can be achieved and improvements in service and safety are realized, they will be included. Agencies should survey the existing building telecommunications infrastructure to ensure that it supports advanced technology and is compatible with modern telecommunications equipment; and
- (2) Agencies and staff offices responsible for wiring employee residences and

buildings with lower cable performance may use ANSI/EIA/TIA-570, Residential and Light Commercial Telecommunications Wiring Standard.

- (3) Obtain waivers and approval from the Office of the Chief Information Officer when the agency or staff office requirements cannot be met under the above standards.

## 9 DEFINITIONS

- a Bonding. The permanent joining of metallic parts to form an electrical conductive path that will assure electrical continuity and the capacity to conduct safely any electrical current likely to be imposed.
- b Ground. A conducting connection, whether intentional or accidental, between an electrical circuit or equipment and the earth, or to some conducting body that serves in place of the earth.
- c Pathway. A facility for the placement of telecommunications cable.

## 10 COPIES OF RELATED DOCUMENTS

- a Copies of FTRs are available from:  
National Communications System, Technology and Standards Division (N6), 701 South Court House Road, Arlington, Virginia 22204-2198, TEL (703) 607-6204
- b Copies of the specifications and related documents can be obtained from:  
ANSI/EIA/TIA Global Engineering Documents Recommendations, 15 Inverness Way East, Englewood, Colorado 80112, Tel (800) 854-7179 or (303) 397-7956.  
National Resource for Global Standards, [www.nssn.org](http://www.nssn.org).

## 11 INQUIRIES

Direct all questions concerning this notice to the Telecommunications Policy and Planning Division, Telecommunications Services and Operations, Office of the Chief Information Officer.